### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-012954 Address: 333 Burma Road **Date Inspected:** 22-Mar-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Li Yan Hua. **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** OBG.

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shailesh Wadkar was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

Outside Yard:

SEG 9DW:

This QA Inspector observed the following work in progress:

Shielded metal Arc Welding (SMAW) of weld no: SSD11A-PP81 – 180 to 186, 190, 191, 204 & 208 (for 9DW). Welders were identified as 069896 & 037748. ZPMC Quality Control (QC) is identified as Tang Ya Jua. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-P-2114-FCM-1.

Repair welding of weld no: SSD10-PP80-232 (for 9DW). Welder is identified as 066179 performing SMAW. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345-SMAW-4G (4F)-FCM-Repair, as per Weld Repair Report (WRR) No: B-WR11120 (& UT report No: B787-UT-11779). ZPMC Quality Control (QC) is identified as Tang Ya Jua.

Repair welding of weld no: SSD10A-PP80-222 (for 9DW). Welder is identified as 066179 performing SMAW.

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The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345-SMAW-4G (4F)-FCM-Repair, as per Weld Repair Report (WRR) No: B-WR11125 (& UT report No: B787-UT-11780). ZPMC Quality Control (QC) is identified as Tang Ya Jua.

Repair welding of weld no: SSD10-PP80-252 (for 9DW). Welders are identified as 066179 performing SMAW. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345-SMAW-4G (4F)-FCM-Repair, as per Weld Repair Report (WRR) No: B-WR11123 (& UT report No: B787-UT-11779). ZPMC Quality Control (QC) is identified as Tang Ya Jua.

#### SEG 9EW:

Repair welding / built up of weld no: SEG057A-001 (for 9EW). Welders are identified as 067752 & 067942 performing SMAW. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345-SMAW-4G (4F)-FCM-Repair, as per Weld Repair Report (WRR) No: B-WR9941 Rev-0. ZPMC Quality Control (QC) is identified as Li Ping. Built up was required to be done as excessive grinding was done on the weld reinforcement.

### SEG 9CE:

This QA Inspector observed ZPMC personnel doing arc gouging of the below mentioned welds.

- SSD20-PP77 237 & 253.
- SSD20A-PP79 222, 242 & 252.

These welds, as per Contractors UT report (No: UT-9E-015 DT: 03/10/10), needs repair to be done. Gouging was done as per approved temporary weld repair report (WRR). ZPMC QC was identified as Tang Ya Jun. This QA Inspector randomly verified the UT report with WRR against the gouged welds.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang; phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Wadkar, Sailesh	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer